



SCAN QR CODE FOR PRODUCT INFO

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# GREATER AND A CONTRACT OF A CO

**NFRY** 





Engine Yanmar 4TNV88-PSY Rated power 29.1 kW / 2 400 rpm Bucket capacity 0.152 m<sup>3</sup> Operating mass 5 300 kg 61

# SANY

#### For challenging tasks, you need a first-class partner

Quality comes from experience. And from new ideas. This is why we combine these two crucial factors at SANY. This is because we are one of the world's leading producers, having sold more than 170 000 excavators in 10 years. This means that you can always rely on sophisticated products that have been tried and tested in practice. An impressive 5-7% of our annual turnover is dedicated to research and development. This is why we give you not only our word, but also our extraordinary five-year warranty as a guarantee of how powerful and robust our products are.



Quality Changes the World

### HARD FACTS Max. bucket digging force 32.5 kN (ISO) Max. arm digging force 22.9 kN (ISO) Swingspeed 10 rpm Max. travel speed 4 km/h -2510 mm

SY50U

### LIGHT WEIGHT, **HEAVY DUTY**

With the SY50U short-tail-swing excavator, you have a specialist at in busy inner-city areas or on busy roads. You can rely on its responsive, your side that can prove its power especially in confined spaces. It requires little space, so can work and manoeuvre everywhere where conventional machines reach their limits – in places that are difficult to access, directly next to walls and house walls, on construction sites

SANY



precise control and on the fact that this small machine is ranked at the level of significantly larger machines in its class in terms of speed and power.

# FCONOMY **OPERATING COSTS DOWN, PRODUCTIVITY UP**

The SY50U is equipped with a particularly effective load-sensing hydraulic system. The piston pumps with a variable flow rate ensure sufficient power to carry out all operations smoothly and safely. The well-balanced combination of speed, power and precise response behaviour guarantees high cost-effectiveness with fuel in every phase: The hydraulic pump always delivers just enough oil as is actually needed.

#### QUALITY

Robust and durable - Especially precise, robot-manufactured welded seams guarantee a long service life under the harshest conditions

#### DIMENSIONS

In the smallest of spaces - The short-tail-swing machine's compact dimensions enable it to manoeuvre masterfully even in the smallest areas of the construction site. This mobility broadens its possible applications and increases productivity.



#### SAFETY

No compromises - Extensive safety equipment is standard, from rotating warning beacons to lockable protective bonnets and battery disconnection switches.

#### **COMPONENTS**

Power - The tried-and-tested Yanmar 4TNV88 PSY engine guarantees reliable performance for all tasks, even in harsh working conditions.

#### Absolute reliability for peace of mind!

SANY's five-year warranty\* gives you the assurance that you can fully count on your equipment.



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#### ECONOMY Less is more

Quality that pays for itself in the long term: Low maintenance requirements and long intervals between maintenance. Additionally, all important maintenance points are very easily accessible. This saves on operating costs and increases cost-effectiveness.



#### QUALITY Metal panels

Durability and robustness are standard features on all SANY excavators. For example, the panels are made solely of metal. This makes them particularly robust - and if a accident happens during the tough everyday work on a construction site, it can usually be straightened out again quickly.



#### **USER EXPERIENCE**

Maintenance and service - The engine bonnet is very easy to open with help from the gas pressure dampers. At the back, the key components for maintenance and service are clearly arranged in the centre. This saves time on routine tasks.



#### **ECONOMY**

Cost-effectiveness as standard - The smart control system adapts the pump capacity to the available engine power for greater efficiency and reduced fuel consumption.



#### EFFICIENCY, COST-EFFECTIVENESS AND USER EXPERIENCE

#### USFR FXPFRIFNCF

## A FOCUS ON THE OPERATOR

The productivity of an excavator is largely dependent on whether the driver can work for long periods in a focused manner. This is why the SY50U is fitted with a particularly roomy driver's cab with the highest level of comfort. The operator can sit comfortably in the ergonomic driver's seat. The height of the armrests can be adapted for fatigue-free working. Despite the compact design, there is also enough room in the footwell - if required, the pedals can be folded away to create more space. The driver has the best possible view of everything from the cab. The quiet-running engine, together with the sound- and vibration-damping design, minimises noise and vibrations.



#### USFR FXPFRIFNCF For a full view

You have everything in view with the large, central display, which shows all important data and values clearly and well arranged. In addition to the basic information, gear selection or attachment device can also be set here. The next planned maintenance is also stored in the menu.



#### **Our highlights – the added** benefits SANY offers you:

- + Short-tail-swing machine with compact dimensions
- + 2 proportional auxiliary control circuit via joystick operation as standard
- + Efficient, powerful load-sensing hydraulic system
- + Clear instruments and a large, high-resolution colour display
- + Automatic speed setting
- + Air conditioning system



# COMPONENTS



#### USER EXPERIENCE **Easy-maintenance** concept

Machines that are quick and easy to maintain save time and money day-to-day on the construction site. The SANY SY50U provides easy access to all points necessary for checking and maintenance work straight from the ground. This means that planned maintenance can be carried out quickly from groundlevel, which increases the machine's availability and service life and ensures that both the operators and the equipment are reliably protected in the long term.

#### DIMENSIONS Quick look round the back

Excavation operations next to obstacles? No problem for the SANY SY50U. With the compact short-tail-swing excavator, you can enjoy the highest degree of manoeuvrability, as well as unlimited rotation.





# MORE LIGHT, MORE VISIBILITY, **MORE SAFETY**

With the SY50U, you can always see what you're working on, even in poor visibility. The powerful LED light's guarantee that the work area is optimally illuminated. Their energy usage is pleasingly low, ensuring that the battery has a long service life. Furthermore, the headlights require almost no maintenance, which saves time and repair costs.

#### SAFETY

#### **Optimum panoramic view**

The large windows and sophisticated cab design ensure that the driver has the best possible view of the area around the vehicle. The 360° panoramic view allows exceptional safety levels in the working area.

#### ENGINE

| Model             | Yanmar 4TNV88-PSY                                 |
|-------------------|---|
| Тур               | Water-cooled, 4 cylinder, with commonrail and DPF |
| Exhaust emissions | Stage V   |
| Rated power       | 29.1 kW / 2400 rpm                                |
| Max. torque       | 144.9 Nm / 1 500 rpm                              |
| Displacement      | 2 191 ccm   |
| Batteries         | 1 × 12 V / 80 Ah                                  |

#### HYDRAULIC SYSTEM

| Mainpump     | 1 x variable-piston-pump with<br>loadsensing control                                |
|--------------|---|
| Max. oilflow | 110 l/min   |
| Travelmotor  | 2 speed axial piston motor with planetary<br>reducer and automatic multi-disc brake |
| Swingmotor   | Axial piston motor with planetary reducer<br>and automatic holding brake            |

#### SERVICE REFILL CAPACITIES

| Fuel tank          | 78   |  |
|--------------------|------|--|
| Engine coolant     | 4.2  |  |
| Engine oil         | 7.4  |  |
| Drive (per side)   | 0.9  |  |
| Hydraulicsystem    | 80 I |  |
| Hydraulic oil tank | 52 I |  |
|                    |      |  |

#### PERFORMANCE

| Cwingonood               | 10 mm                      |
|--------------------------|----------------------------|
| Swingspeed               | 10 rpm                     |
| Max. travel speed        | High 4 km/h, slow 2.7 km/h |
| Max. travel force        | 40.7 kN                    |
| Gradeability             | 30°                        |
| Bucket capacity          | 0.152 m <sup>3</sup>       |
| Groundpressure           | 0.32 kg/cm <sup>2</sup>    |
| Bucket digging force ISO | 32.5 kN                    |
| Arm digging force ISO    | 22.9 kN                    |

#### **OPERATING MASS**

SY50U

5 300 kg

#### UNDER AND UPPER STRUCTURE

| Boom length     | 2700 mm  |
|-----------------|--|
| Arm length      | 1 500 mm   |
| Bottomrollers   | 1  |
| Toprollers      | 4  |
| Rotation device | Planetary gear reducer driven by an axial<br>piston motor, automatic hydraulic released<br>slewing brake |

#### RELIEF VALVE SETTINGS

| Implement circuit | 245 bar |
|-------------------|---------|
| Swing circuit     | 191 bar |
| Travle circuit    | 245 bar |
| Pilot pressure    | 35 bar  |

#### LIFTING CAPACITIES OF LOWER DOZER BLADE

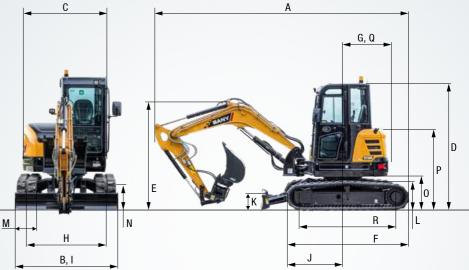
| •                 |     | Radius |      |      |          |         |           |         | Digging reach |         |      |
|-------------------|-----|--------|------|------|----------|---------|-----------|---------|---------------|---------|------|
| 2.0 m / 6.6 ft 3  |     |        |      |      | / 9.8 ft | 4.0 m / | ′ 13.1 ft | 5.0 m / | ′ 16.4 ft     | Max     | imal |
| Load po<br>height | int | ⋺      |      | ∍    |          | ⋺       |           | ∍–€     |               | ∍       |      |
| 4.0 m             | kg  |        |      |      |          |         |           |         |               | 1085    | 845  |
| 13.1 ft           | lb  |        |      |      |          |         |           |         |               | 2387    | 1859 |
| 3.0 m             | kg  |        |      |      |          | 1050    | 815       |         |               | 1050    | 655  |
| 9.8 ft            | lb  |        |      |      |          | 2310    | 1793      |         |               | 2310    | 1441 |
| 2.0 m             | kg  |        |      | 1545 | 1 190    | 1 190   | 790       |         |               | 1055    | 580  |
| 6.6 ft            | lb  |        |      | 3399 | 2618     | 2618    | 1738      |         |               | 2321    | 1276 |
| 1.0 m             | kg  |        |      | 2020 | 1 110    | 1365    | 760       | 1080    | 560           | 1075    | 555  |
| 3.3 ft            | lb  |        |      | 4444 | 2442     | 3003    | 1672      | 2376    | 1232          | 2365    | 1221 |
| Ground            | kg  |        |      | 2165 | 1075     | 1445    | 735       |         |               | 1 100   | 575  |
| line              | lb  |        |      | 4763 | 2365     | 3179    | 1617      |         |               | 2420    | 1265 |
| -1.0 m            | kg  | 2735   | 2000 | 1975 | 1075     | 1 325   | 735       |         |               | 1 1 1 0 | 655  |
| - 3.3 ft          | lb  | 6017   | 4400 | 4345 | 2365     | 2915    | 1617      |         |               | 2442    | 1441 |
| -2.0 m            | kg  | 2135   | 2050 | 1370 | 1100     |         |           |         |               | 1040    | 905  |
| -6.6 ft           | lb  | 4697   | 4510 | 3014 | 2420     |         |           |         |               | 2288    | 1991 |

#### LIFTING CAPACITIES OF UPPER DOZER BLADE

|                      |   | Radius |          |         |          |         |           |         |           | Diggin | g reach |
|----------------------|---|--------|----------|---------|----------|---------|-----------|---------|-----------|--------|---------|
|                      | _ | 2.0 m  | / 6.6 ft | 3.0 m   | / 9.8 ft | 4.0 m / | ′ 13.1 ft | 5.0 m / | ′ 16.4 ft | Мах    | imal    |
| Load point<br>height | t | ⊃–∄    |          | ∋–€     |          | ⊃       |           | ∋–€     |           | ⋺      |         |
| 4.0 m k              | g |        |          |         |          |         |           |         |           | 1025   | 845     |
| 13.1 ft lb           | b |        |          |         |          |         |           |         |           | 2255   | 1859    |
| 3.0 m k              | g |        |          |         |          | 985     | 815       |         |           | 790    | 655     |
| 9.8 ft lb            | b |        |          |         |          | 2167    | 1793      |         |           | 1738   | 1441    |
| 2.0 m k              | g |        |          | 1 4 8 5 | 1 190    | 960     | 790       |         |           | 700    | 580     |
| 6.6 ft lb            | b |        |          | 3267    | 2618     | 2112    | 1738      |         |           | 1540   | 1276    |
| 1.0 m k              | g |        |          | 1 400   | 1 110    | 925     | 760       | 680     | 560       | 675    | 555     |
| 3.3 ft lb            | b |        |          | 3080    | 2442     | 2035    | 1672      | 1496    | 1232      | 1485   | 1221    |
| Ground k             | g |        |          | 1360    | 1075     | 905     | 735       |         |           | 700    | 575     |
| line It              | b |        |          | 2992    | 2365     | 1991    | 1617      |         |           | 1540   | 1265    |
| -1.0 m k             | g | 2735   | 2000     | 1355    | 1075     | 900     | 735       |         |           | 800    | 655     |
| - 3.3 ft lt          | b | 6017   | 4400     | 2981    | 2365     | 1980    | 1617      |         | _         | 1760   | 1441    |
| -2.0 m k             | g | 2135   | 2050     | 1370    | 1 100    |         |           |         |           | 1040   | 905     |
| -6.6 ft lb           | b | 4697   | 4510     | 3014    | 2420     |         |           |         |           | 2288   | 1991    |

#### DIMENSIONS (TRANSPORT)

| A | Transport length             | 5390 mm  |
|---|------------------------------|----------|
| В | Transport width              | 1 960 mm |
| С | Upperstructure carriage      | 1760 mm  |
| D | Height over cabin/TOPS       | 2630 mm  |
| E | Height of Boom – transport   | 2060 mm  |
| F | Overall length of crawler    | 2510 mm  |
| G | Tail length                  | 980 mm   |
| H | Track gauge                  | 1 560 mm |
| I | Undercarriage width (blade)  | 1 960 mm |
| J | Horizontal distance to blade | 1 790 mm |
| K | Blade height                 | 340 mm   |
| L | Track height                 | 610 mm   |
| М | Track pads width             | 400 mm   |
| N | Min. ground clearance        | 325 mm   |
| 0 | Counterweigth clearance      | 675 mm   |
| P | Engine cover height          | 1 660 mm |
| Q | Tail swing radius            | 980 mm   |
| R | Center distance of tumblers  | 1 970 mm |
|   |                              |          |

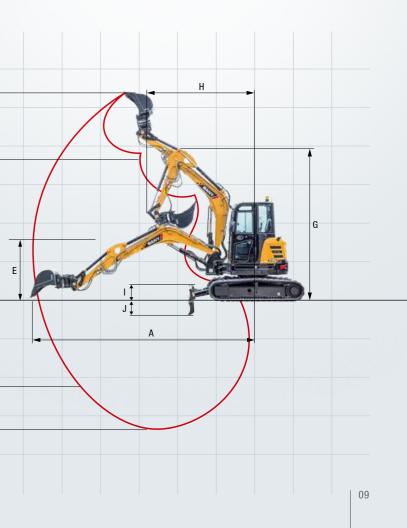


#### WORKING AREA

| Α | Max. digging reach                           | 5880 mm  |
|---|--|----------|
| В | Max. digging depth                           | 3420 mm  |
| С | Max. digging height                          | 5450 mm  |
| D | Max. dumping height                          | 4155 mm  |
| E | Min. dumping height                          | 1 410 mm |
| F | Max. vertical digging depth                  | 2460 mm  |
| G | Overall height over arm by min. swing radius | 4155 mm  |
| Н | Swing radius by max. boomswing (L)           | 2260 mm  |
|   | Swing radius by max. boomswing (R)           | 2080 mm  |
|   | Min. swing radius                            | 2520 mm  |
| I | Max. clearance when blade up                 | 420 mm   |
| J | Max. depth of blade down                     | 405 mm   |
| Κ | Offset boom (L)                              | 745 mm   |
|   | Offset boom (R)                              | 710 mm   |
|   | Max. boom-swing angle (L)                    | 58°      |
|   | Max. boom-swing angle (R)                    | 54°      |
|   |  |          |







#### EQUIPMENT

#### The SY50U – great results and great equipment

The SY50U ex-works is an all-rounder and perfectly equipped for a range of applications. Optional extra equipment and attachment devices are available to increase its flexibility even more.

#### **OPERATORS COMFORT / CABIN**

#### Heater Manual air condition system . Radio and speaker Armrests (adjustable) 12v outlets • Wiper Sprayer f. wiper . AUX 1 on Joystick AUX 2 on Joystick • 8 stored hydraulic settings for attachments Removable front-window SAFETY

| Battery master switch | • |
|-----------------------|---|
| Travel Alarm          | • |
| Warning beacon        | • |
| Lockable hoods        | • |

#### WORKING EQUIPMENT

| Boom and arm load holding valves with overload indicator      | • |
|---|---|
| Double acting circuit for hydraulic quick coupler with piping | • |
| Breaker&Shear line proportional on Joystick with piping       | • |
| Rotation line proportional on Joystick with piping            | • |
| Flow adjustment for attachments                               | • |
| Dozer blade   | ٠ |
| Cylinder guardes – boom                                       | • |
|   |   |

#### WORKING LIGHTS

| Lights – front (LED)            | • |
|---------------------------------|---|
| Lights – boom (LED)             | • |
| UNDERCARRIAGE                   |   |
| Rubber tracks                   | • |
| Steel tracks                    | • |
| Holes/loops for fixing          | • |
| Safety valves on blade cylinder | • |
| ENGINE                          |   |
| Auto idle                       | • |
| Diesel filter                   | • |
| 225                             |   |

#### DPF Airfilter

#### HYDRAULIC SYSTEM

| Swing brake                                    | • |
|--|---|
| 2 speed travel                                 | • |
| Hydr. Pre-pressure operating joysticks         | • |
| Piping for additional hydraulic function AUX 1 | • |
| Piping for additional hydraulic function AUX 2 | • |
| Mainfilter                                     | • |

# **A SERVICE YOU CAN RELY ON**

Just as we do with our excavators, we also demand high quality for efficiency, cost-effectiveness and safety. Your SANY dealer is and reliability of our service products. This underlines our happy to help you with a comprehensive range of services to equipment's performance in terms of their durability and their excellent price-performance ratio. After all, maintenance is crucial

YELLO

YELLO

#### SANY - flexible, fast and always there for you

Rapid assistance, tailored advice and a reliable supply of original parts - that is what we mean by a premium service.





Standard equipment • Special option 

Special option

The standard and special options differ depending on the country in which the mini excavator is delivered. If you have any questions, please contact your dealer directly

#### Parts supply – quick and reliable

With the purchase of a SANY mini excavator you have made an investment in the future. Fast availability of spare parts is your guarantee of minimal downtimes and failure times.

#### Detailed information in black and white

Handbooks and documents are available for all SANY mini excavators, and these can help you with operation, maintenance, servicing and repairs. These include operating and maintenance instructions and technical specifications.

#### SANY SERVICE

ensure that your machine continues operating efficiently in the long term.



# HIGHLIGHTS SY50U

# PERFECT COMBINATION OF COMPACTNESS + AND POWER

The SANY SY50U really is a powerful little machine. Its compact design means it is at home on urban construction sites, as well as anywhere with areas that are particularly small. Its power and versatility therefore ensure productivity.

#### **ROBUST AND DURABLE**

All components are designed to withstand high stress. The workmanship of the materials is also especially **high-quality** – almost all the **welded seams are perfectly executed by welding robots**.

#### IN THE SMALLEST OF SPACES

The **robust swivel bracket** is the most important aspect for all tasks. It enables the machine to achieve its exceptionally **compact mobility**.

#### MAINTENANCE AND SERVICE

Thanks to the engine bonnet supported by gas pressure dampers and the central, clear arrangement of the key components, usual routine checks and work on the machine can be carried out quickly and easily.

#### **NO COMPROMISES**

Daily operations on the construction site make high demands on both operators and machines. **Excellent safety components** are therefore always included, such as the **stable cylinder covers**.

#### POWER

The **powerful Yanmar 4TNV88 PSY engine** means that this mini excavator is also perfectly suited to "maxi" tasks.

#### COST-EFFECTIVENESS AS STANDARD

In conjunction with the electronic fuel injection, the autothrottle function adjusts the engine speed to the power required. This means that the smart hydraulic system reduces the fuel consumption, engine wear and exhaust emissions. This is positively reflected in its cost-effectiveness and low life cycle costs.

#### **TECHNICAL HIGHLIGHTS**

| Engine            | Yanmar 4TNV88-PSY                                    |
|-------------------|--|
| Rated power       | 29.1 kW / 2 400 rpm                                  |
| Max. torque       | 144.9 Nm / 1 500 rpm                                 |
| Max. travel speed | 4 km/h   |
| Swingspeed        | 10 rpm   |
| Mainpump          | 1 x variable-piston-pump with<br>loadsensing control |
| Max. oilflow      | 110 I/min  |
|                   |  |

Not all products are available in all markets. As part of our continuous improvement process, we reserve the right to modify specifications and designs without giving prior notice. The figures may contain additional options.

#### YELLO EQUIPMENT

SANY AUTHORISED DEALER



